

REMARKS:

Claims 1-21 are pending in the application.

Claims 1-20 have been amended, and Claim 21 introduced, to better describe the invention and to place the claims in better form for allowance. In particular, claims 1 and 6 have been amended to better define the slots as "thin slots and fissures." Support can be found throughout the specification and in particular at page 3 of the present invention. No new matter has been added.

The claims have been amended to eliminate the formal objections and rejection under 35 U.S.C. §112, second paragraph, raised in paragraphs 1-3 of the Office Action, with Claim 21 introduced in this regard. More particularly, in the Office Action, Claims 1 and 6 have been objected for using the term "exerting." By way of this amendment, the term "exerting" has been replaced with "exposing." In addition, Claims 1-20 have been objected for using the phrase "characterized in that." By way of this amendment, the phrase "characterized in that" has been replaced with the term "wherein." Accordingly, in view of the amendments to the claims discussed above, it is respectfully requested that the objection of claims 1-20, and 1 and 6 be reconsidered and withdrawn.

In the Office Action, claim 3 was rejected under 35 U.S.C. §112, second paragraph, for allegedly not setting forth the metes and bounds of the claim. In particular, claim 3 was rejected for including a narrower range within a broader range. By way of this amendment, the narrower range has been deleted from claim 3 without prejudice and Claim 21 introduced.

Turning now to the rejection on the merits, Claims 1,8, 10, 11, 13, 15-19 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Russell (Composite Repair Issues on CF-18 Aircraft, AGARD Conference Proceedings, Vol. 550, pages 14-1 to 14-8), in

paragraph 4 of the Office Action. In making the rejection, the Examiner states Russell teaches (pages 14-1 to 14-3) a method for filling pores between two adjacent layers of a laminate for a component with high demands upon strength. The Examiner also acknowledges Russell seems to be silent with respect to the limitation "characterized in that in step a) said connection path is created by exerting the laminate at least in the region of said pores to forces making slots propagating substantially in the matrix through each laminate layer along the fiber direction of the layer." (See Office Action, page 4).

However, the Examiner takes the position this limitation is *inherent* or *prima facie* obvious over the method of Russell. In particular, the Examiner states Russell teaches the penetration damage to panels created using high speed gun gas facility and concludes such a gas gun would *inherently* create connection paths by exerting upon the laminate, forces making slots propagating in the matrix and through each laminate layer along the fiber direction (See Office Action, page 4).

The Applicants respectfully disagree. As stated above, claim 1 has been amended to recite a connection path is created by exposing the laminate 1', 1" in the region of the pores 2 to forces making thin slots or fissures 4 (reference is being made to preferred embodiments of the present invention illustrated in the drawings of the present application). In other words, the force used must produce thin slots or fissures 4 propagating substantially in the matrix through each laminate layer 1', 1" along the fibre direction of the layer 1', 1" (Please see Claim 1 as Amended).

In stark contrast, Russell recites the use of a mounted portable drill that makes "coarse holes" and/or the use of a high speed gun facility in order to produce "damage." Both the "coarse holes" produced from the mounted portable drill and the "damage" produced by the

gas-gun facility used in Russell, are structurally distinct from the thin slots or fissures 4 explicitly generated by the claimed method. In fact, as discussed above, even Russell itself describes the holes produced by the gas-gun facility as “damage” instead of more precise terminology. Similarly, Russell describes the holes made by the mounted portable drill as “coarse holes,” not “thin slots or fissures” as required by the claims.

For this reason, Russell does not teach or suggest a method for filling pores between two adjacent layers as described in the present invention; therefore the rejection under 35 U.S.C. § 103 must be reconsidered and withdrawn. In addition, since claims 2-20 ultimately depend from claim 1, all of the features, attributes and limitations recited therein are also in the dependent claims. Therefore, for the same reasons discussed above with reference to claim 1, the rejection of claims 8, 10, 11, 13, 15-19 should also be reconsidered and withdrawn.

In the Office Action, claims 2-5 and 20 have been rejected under Russell (Composite Repair Issues on CF-18 Aircraft, AGARD Conference Proceedings, Vol. 550, pages 14-1 to 14-8) in view of Wilenski (Evaluation of an E-Beam Cured Material for Cryogenic Structure Usage 47th International SAMPLE symposium, 2002, pages 109-123). In making the rejection, the Examiner refers to Russell for teaching the subject matter of claims 1. For the reasons stated above, the Russell it is respectfully asserted that Russell does not teach or suggest the specific claim limitations of claim 1 discussed above and therefore any dependent claim based on claim 1 that is rejected in part over Russell can not stand. Accordingly, for all of the reasons stated above in the rejection of claim 1, it is respectfully requested that the rejection of claims 2-5 and 20 be reconsidered and withdrawn.

Claims 6,7,9 and 12 also depend from claim 1 and were rejected under 35 U.S.C. §103(a) over Russell in view of Kessler (Self-Activated healing of delamination damage in woven compositions, Composites: Part A, Vol. 32,2001, pages 683-699). For the reasons stated above in the rejection of claim 1, Russell does not teach or suggest the specific claim limitations of claim 1 and therefore any dependent claim based on claim 1 that is rejected over Russell can not stand. Accordingly, for all of the reasons stated above in the rejection of claim 1, it is respectfully requested that the rejection of claims 6,7,9 and 12 be reconsidered and withdrawn.

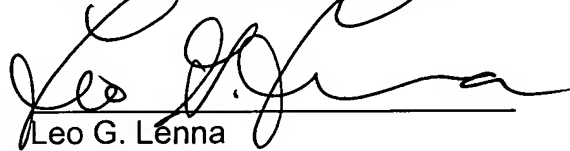
Claims 6,7,9 and 12 also depend from claim 1 and were rejected under 35 U.S.C. §103(a) over Russell in view of Rau (USPN4,737,330). For the reasons stated above, Russell does not teach or suggest the specific claim limitations of claim 1 and therefore any dependent claim based on claim 1 that is rejected over Russell can not stand. Accordingly, for all of the reasons stated above in the rejection of claim 1, it is respectfully requested that the rejection of claims 6,7,9 and 12 be reconsidered and withdrawn.

Finally, claim 14, which depends from claim 1, was rejected under 35 U.S.C. §103(a) over Russell in view Dehm (Fast, In-Situ Repair of Aircraft Panel Components, J. Aircraft, Vol. 26, No. 5, 1989, pages 476-81. For the reasons stated above, Russell does not teach or suggest the specific claim limitations of claim 1 and therefore any dependent claim based on claim 1 that is rejected over can not stand. Accordingly, for all of the reasons stated above in the rejection of claim 1, it is respectfully requested that the rejection of claim 14 be reconsidered and withdrawn.

In view of the foregoing, favorable consideration of the application as amended is respectfully requested. Please contact the undersigned attorney should there be any questions. Additionally, the requisite fee for the additional claim introduced herein is also enclosed.

Early favorable action is earnestly solicited.

Respectfully submitted,
DILWORTH & BARRESE LLP.

A handwritten signature in black ink, appearing to read "Leo G. Lenna", is written over a horizontal line.

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